

um of Plasma Enhanced CVD (PECVD) oxide over which a layer within the range of approximately 0.5 to 2.0 um PECVD nitride is deposited.

14. The method of claim 1 wherein said insulating, separating layer is a polymer dielectric layer or any other appropriate insulating material.

15. The method of claim 1 wherein said insulating, separating layer comprises polyimide.

16. The method of claim 1 wherein said insulating, separating layer comprises the polymer benzocyclobutene (BCB).

17. The method of claim 1 wherein said insulating, separating layer is of a thickness after curing within the range of approximately 1.0 to 30 um.

18. The method of claim 1 wherein said insulating, separating layer is spin-on coated and cured.

19. The method of claim 1 wherein said insulating, separating layer after said spin-on coating is cured at a temperature within the range of approximately 250 to 450 degrees C. for a time

within the range of approximately 0.5 to 1.5 hours said curing to occur within a vacuum or nitrogen ambient.

20. The method of claim 16 wherein said insulating, separating layer is subjected to multiple processing steps of spin on coating and curing.

21. The method of claim 20 wherein said insulating, separating layer after each process step of said spin on coating is cured at a temperature within the range of approximately 250 to 450 degrees C. for a time within the range of approximately 0.5 to 1.5 hours said curing the occur within a vacuum or nitrogen ambient.

22. The method of claim 1 wherein said openings have an aspect ratio within the range of approximately 1 to 10.

23. The method of claim 1 wherein said metal contacts are selected from a group comprise sputtered aluminum, CVD tungsten, CVD copper, electroplated copper and electroless nickel.

24. The method of claim 1 wherein said metal contacts comprise damascene metal filling.

25. The method of claim 1 wherein said top metalization system comprises contact pads on the top metal layer whereby said contact pad can comprise any appropriate contact material, such as but not limited to tungsten, chromium, copper (electroplated or electroless), aluminum, polysilicon, or the like.

26. The method of claim 1 wherein said top metal layer comprises contact pads, said contact pads comprising signal connection pads whereby said signal connection pads can comprise any appropriate contact material, such as but not limited to tungsten, chromium, copper (electroplated or electroless), aluminum, polysilicon, or the like.

27. The method of claim 1 wherein said top metalization system contains contact pads on the top metal layer, said contact pads containing signal connection pads in addition to power and ground connection pads whereby said signal connection pads can comprise any appropriate contact material, such as but not limited to tungsten, chromium, copper (electroplated or electroless), aluminum, polysilicon, or the like.

28. The method of claim 27 wherein said signal pads are mounted in the periphery of said top metalization system and said power and ground connection pads are mounted within the area enclosed